

Amendments to the Claims

Listing of Claims:

Claims 1-10 (canceled).

Claim 11 (currently amended). A method for operating an injection valve having housing and at least the following components commonly disposed in the housing:

a piezoelectric actuator for generating a stroke, a displaceable component to be displaced, and a hydraulic element forming a hydraulic bearing for play compensation between the housing and the piezoelectric actuator,

the method which comprises:

biasing the actuator with a bias voltage having a polarity opposing a preferred polarity of the actuator, to thereby cause a preliminary contraction of the actuator and a corresponding increase in a height of the hydraulic bearing; and

applying a drive voltage to the actuator, the drive voltage having a polarity corresponding to the preferred polarity of the actuator, to thereby generate a stroke of the displaceable component ~~greater~~ greater than the preliminary contraction of the actuator and having a value defined by a voltage-driven expansion of the actuator and the increase in the height of the hydraulic bearing.

Claim 12 (previously presented). The method according to claim 11, wherein the bias voltage is lower than a voltage causing a change in a polarity of the actuator.

Claim 13 (canceled).

Claim 14 (previously presented). The method according to claim 11, which comprises determining the bias voltage to effect a reduction in an energy consumption of the actuator.

Claim 15 (previously presented). The method according to claim 11, which comprises specifying the drive voltage together with bias voltage for setting a defined stroke of the displaceable component.

Claim 16 (previously presented). The method according to claim 15, which comprises determining a volume of material injected with the injection valve by way of the defined stroke of the displaceable component.

Claim 17 (currently amended). In a control unit for generating a drive voltage for an injection valve, the injection valve having at least one piezoelectric actuator, a displaceable component, and a hydraulic element forming a hydraulic bearing commonly disposed in a common housing;

said control unit being configured to generate a bias voltage for biasing the actuator in opposition to a preferred polarization direction of the actuator to cause a preliminary contraction of the actuator and a corresponding increase in a height of the hydraulic bearing, and

to generate the drive voltage having a polarity in the preferred polarization direction of the actuator, to thereby generate a stroke of the displaceable component;

wherein the preliminary contraction of the actuator in combination with the following stroke represents an increase of the stroke of the displaceable component using the bias voltage and the increase in the height of the hydraulic bearing further increases the stroke of the displaceable component.

Claim 18 (previously presented). The control unit according to claim 17, wherein the bias voltage is lower than a voltage that would result in a change in a polarity of the actuator.

Claim 19 (previously presented). In combination with a gasoline engine, the control unit according to claim 17 configured to drive an injection valve for injecting fuel into the gasoline engine.

Claim 20 (previously presented). In combination with a diesel engine, the control unit according to claim 17 configured to drive an injection valve for injecting fuel into the diesel engine.

Claim 21 (previously presented). The method according to claim 11, wherein the displaceable component to be displaced is an injector needle.

Claim 21 (currently amended). A method for operating an injection valve having at least one piezoelectric actuator, a displaceable component, a hydraulic element,

and a common housing with said actuator, said component, and said element disposed therein, the method which comprises:

biasing the actuator with a bias voltage having a sign opposite a sign of the drive voltage to thereby contract the actuator and to increase a height of the hydraulic bearing, the bias voltage having a value below a voltage causing a change in a polarity of the actuator; and

subsequently applying a drive voltage with a sign opposite the bias voltage to generate a stroke of the displaceable component having a value defined by a voltage-driven expansion of the actuator and the increase in the height of the hydraulic bearing.